

COUNTY BOROUGH OF WARRINGTON.

Annual Report

TO THE

Education Authority

ON

SCHOOL HYGIENE

For the Year 1924.

BY

G. W. N. JOSEPH, M.D., D.P.H.,

Medical Officer of Health
and School Medical Officer

WARRINGTON :

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SCHOOL MEDICAL SERVICE COMMITTEE.

LIST OF MEMBERS, 1924-25.

Alderman JAMES EVANS, Mrs. C. JACKSON HOLMES,
Councillor GEORGE ARCHER, Mr. SYDNEY W. JEFFERY,
Councillor JOSEPH BANKS, Mr. CHARLES E. PARKER (Chairman).
Councillor FRANK STRINGER, Mr. EDWIN PLINSTON,
Mr. FREDERICK HODSON, Mr. GEORGE WALKER.

Ex-Officio. Alderman DAVID TINNION.
(Chairman of the Education Committee).

OFFICIALS.

Office held.	Name.	Qualifications.
School Medical Officer ...	G. W. N. JOSEPH	M.D., B.Ch., D.P.H.
Assistant School Medical Officer	C. A. PAULUSZ	L.R.C.P., L.R.C.S. (Ed.), L.R.F.P. & S. (Glas.), L.M.R.C.P.I., D.P.H.
Dental Officer	W. HUTCHISON	L.D.S.
School Nurses	Miss BROWN	General Cert.
	Miss MASON	General Cert. & C.M.B. Cert.
	Miss GRIFFITHS	General Cert. & Hygiene Cert. (Queen's).
	Miss RITSON	General Cert.
Clerical Staff.		
Clinic Registration Clerk	Miss E. Warburton..	
Dental Clerk	Miss M. Sankey	
Medical Inspection Clerk	Miss A. Mills	
Special Officer	Mr. W. Rutter	
Medical Inspection Clerk	Mr. J. Benion	
Assistant Secretary for Education	Mr. R. Price	
Director of Education	J. Moore Murray ...	M.Sc. (Vict.).

SCHOOL CLINICS.

Inspection Clinic... (page 22)	Health Dept., Sankey Street	Examination of cases referred by Teachers, Attendance Officers, Nurses, &c.	Daily 2-3 p.m. (week-days) 11-12 a.m. (Sat.)
Minor Ailment Clinic (page 21)	„	Treatment of contagious diseases of skin, eyes, &c.	2-5 p.m. daily Sats., 9 a.m. to 12 noon
Dental Clinic (page 31)	„	Dental treatment	9.30 a.m. to 12 noon 2 p.m. to 5 p.m. Special cases. Thurs. & Sat. mornings
Eye Clinic (page 27)	Warrington Infirmary	Prescription of spectacles	11 a.m. Saturdays
Throat Clinic (page 28)	„	Treatment of enlarged tonsils and adenoids	Tuesday, 10 a.m. Friday (operations)
X Ray Clinic	12, Rylands Street	Treatment of ring-worm of scalp	Tuesday, 10 a.m.

TO THE EDUCATION AUTHORITY OF THE
COUNTY BOROUGH OF WARRINGTON.

LADIES AND GENTLEMEN,

I beg to submit to you my Twelfth Annual Report on School Hygiene, viz., that for the year 1924.

Of the children attending our Public Elementary Schools 6,116 were medically examined during the year (exclusive of re-examinations) either at the Routine Medical Inspections in the Schools or at various special inspections either in the Schools or at the Clinic. (See page 52).

The number of children found at the Routine Inspections with defects requiring treatment (exclusive of uncleanliness and defective clothing) was 709, or 17·8% of those examined.

This percentage is the lowest yet recorded (in 1923 it was 24·6%).

Practically all these defects received satisfactory treatment during the year.

A noteworthy feature is the comparatively small number of verminous heads found amongst the children now compared with former years (see page 8).

For the treatment of minor ailments 377 children made 5,022 attendances at our School Clinic.

In addition, the Nurses performed 34,337 dressings in the schools (see page 24), thus avoiding the necessity of excluding children from attendance.

Apart from the benefit accruing to the children owing to the more rapid cure of their ailments, this system has decidedly increased the grant, as it saved no less than 86,226 school attendances, compared with the year 1918 (see page 23).

Special consideration was given by the School Medical Service Sub-Committee during the year to the question of the provision of a special school for defective children. Fairfield House and Grounds were inspected with this end in view, but finally it was decided to ask the Local Authority to secure a site in Bewsey Ward for this purpose.

Arrangements were entered into for providing a Special Orthopædic Centre for certain cases requiring massage and electrical treatment, and this should prove a great boon to many of our cripples (see page 41).

Some remarks are made on page 47 on our experience in the various methods of treating cases of ringworm of the scalp, and also a comparison is made (page 50) between the number of defects found in entrants who have attended our Infant Welfare Centres and those who have not.

Dr. Paulusz carried on the duties of Assistant School Medical Officer during the year, and I have to thank him for many of the statistics that follow.

The work of Mr. Hutchison, the School Dental Officer, and the four Nurses is referred to in the body of the Report (pages 30 and 18).

Mr. Flood, Chief Sanitary Inspector, has given me much valuable assistance in investigating the sanitary condition of the Schools.

I wish to convey my thanks to Mr. J. Moore Murray, the Director of Education, for assistance in collecting certain information.

I have much pleasure in stating that there has been that hearty co-operation between the officials of the Education Department and the Health Department during the past year that is necessary for the due carrying out of the work detailed in this Report.

Lastly. I would like to place on record my appreciation of the cordial support always rendered to me by the Members of the School Medical Service Committee and the Local Education Authority.

I am, Gentlemen,

Your obedient Servant,

G. W. N. JOSEPH.

February, 1925.

1.—STAFF.

No changes were made in the number of the Staff engaged in the School Medical Service in Warrington during 1924, and as particulars of the duties were given in my Report for 1920 they will not be repeated here.

This Staff keeps under supervision the 13,117 children at present on the school registers.

2.—CO-ORDINATION WITH OTHER HEALTH SERVICES.

There has always been close co-operation between the work of the School Medical Service and that of the local Health Department, as described in former Reports.

3.—SANITARY CONDITION OF THE PUBLIC ELEMENTARY SCHOOLS.

A Review of the hygienic conditions of the Schools in the area, with particular reference to their surroundings, ventilation, lighting, warming, equipment, and sanitation, was given in the Report for 1922.

There are at present in Warrington 23 Public Elementary Schools, divided into 47 Departments.

No structural alterations of note, except the installation of central heating at Hamilton Street School, were made in 1924, but many Schools were cleaned and decorated.

The Education Authority submitted proposals to the Board of Education for :—

- (1) provision of an Infants' School for 360 children in Oliver Street;
- (2) provision of a site in Bewsey Ward for—
 - (a) an elementary school;
 - (b) intermediate schools (boys and girls);
 - (c) playing fields for elementary school children;
- (3) provision of site in Bewsey Ward for playing fields for secondary school children;
- (4) provision of site in Bewsey Ward for special school for Defective children;
- (5) provision of a site for a school between Alder Lane and the Cheshire Lines Railway;
- (6) provision of a site near Black Bear Bridge, Latchford.

I cannot refrain from repeating certain remarks from last year's Report on the two outstanding sanitary defects remaining in our schools.

It is of the utmost importance that the children should be taught under ideal hygienic conditions. Not only do they spend some 27 hours a week on the school premises, but it is here that some of the most lasting impressions of a child's life are formed. The facilities for lighting, ventilation, cleansing, etc., therefore must be of the best.

We realise nowadays that one of the great needs of the community is for education in health matters, and it is essential that this should begin in the Schools.

I would urge strongly, therefore, that the two defects referred to—pail closets and closed stoves—should receive attention.

Pail Closets are still in use at the following Schools :—

Trinity (Infants).
Silver Street (Boys).
Latchford St. James'.
Sacred Heart.
Thewlis Street.
St. Barnabas'.
Wycliffe.

The conversion of these pail closets to the water-carriage system should be carried out with as little delay as possible. It is most objectionable as well as unhygienic to have pail closets situated in a school playground, and, in addition, in some cases, in close proximity to the schoolroom windows.

Closed Stoves are still made use of for heating purposes in the following Schools :—

Heathside.
St. Alban's.
St. Peter's.
St. Barnabas' (Infants).

This is unsatisfactory ; the air becomes dry and detrimental to both teachers and scholars. There is also the danger of poisonous products of combustion finding their way from the stove into the classroom air. With the wind in certain directions or when the top lid has to be opened to reduce the draught, a considerable portion of the fumes blow back into the room.

There is no doubt that if in these schools an outside boiler was installed, efficient heating by the low-pressure system of hot-water

pipes could be obtained, with a great saving annually in the amount of fuel consumed.

4.—MEDICAL INSPECTION.

The Routine Medical Inspections are conducted by the Assistant Medical Officer during the mornings at the various schools in the Borough.

The arrangements made for carrying out this work have been detailed in earlier Reports.

Age Groups Inspected.—School children in Warrington are medically examined at least three times during their period of attendance at an elementary school, viz., during their 5th, 8th and 13th years. These are referred to as the “ Entrant,” “ Intermediate ” and “ Leaver ” groups of children.

In order that children who, for any reason, miss a routine inspection, should not wait until the next age period before they are examined, they are again summoned for inspection during the year after the usual period.

The numbers dealt with in 1924 were as follows :—

Entrants	..	..	..	..	1344
Intermediate	..	..	..	..	1336
Leavers	..	..	..	..	1303
					—————
					3983 (2021 boys
					———— 1962 girls)

Further particulars of age and sex are given in Table Ia, page 52.

The number inspected the previous year was 3,782.

For inspections in the Secondary School, see page 52).

Special Cases.

Many children are specially examined each year, apart from those notified for examination at the Routine Inspection.

The teachers submit any special case to the doctor at the time of inspection in the Schools, or special cases may at any time be sent to the School Clinic.

In this connection the following were dealt with in 1924 :—

“ Specials ” at School and Clinic .. 2133

Various additional examinations and re-examinations are carried out both in the Schools and the Clinic (see page 20).

For fuller statistics of the work of medical inspection reference should be made to Table I., page 52.

All Routine Inspections were carried out on the school premises (Article 44b).

The Board's schedule of medical inspection was followed in every instance and there was no disturbance of the ordinary school arrangements.

5.—FINDINGS OF MEDICAL INSPECTION.

Out of the 3,983 children examined in our Schools at Routine Medical Inspection during 1924, 709 were found to be suffering from some defect which either required treatment or needed to be kept under observation.

This gives a percentage of 17·8 and is the lowest for several years.

For the statistics relating to the year's work, reference should be made to Table II. appended to this Report (page 53).

The following is a brief review of some of the facts revealed :—

(a) Uncleanliness.

The progressive diminution in the number of verminous heads continues from year to year, and for 1924 the percentage 2·4 is the lowest on record for the Borough.

The percentage of cases with verminous heads (i.e., nits or pediculi or both) is shown in the next table compared with recent years :—

1916	...	...	...	...	10%
1917	...	...	...	...	10.73%
1918	...	...	...	...	15.8%
1919	...	...	...	...	11.2%
1920	...	...	...	...	6.3%
1921	...	...	...	...	3.8%
1922	...	...	...	...	6.6%
1923	...	...	...	...	3.6%
1924	...	...	...	...	2.4%

The cleanliness of the heads of the Warrington school children has never been better and this is all the more noteworthy because the standard adopted in examination is a very high one.

This is referred to again on pages 33 and 34.

(b) Minor Ailments.

Among minor ailments impetigo, which, to a large extent is a dirt disease, has declined with dirty heads, although for 1924 the percentage found (.6%) was slightly in excess of the previous year (.58%).

	No. examined.	Impetigo.	Pediculosis.
1920	3813	74(1.9%)	321(8.3%)
1921	4724	43(.91%)	171(3.5%)
1922	4519	23(.51%)	300(6.6%)
1923	3782	21(.58%)	137(3.6%)
1924	3983	24(.6%)	98(2.4%)

In 1924 the proportion of children found by the School Doctor to be suffering from some of the other minor ailments, compared with previous years, was as follows :—

	1924.	1923.	1922.	1921.	1920.
Ringworm (Scalp)	.1%	.07%	.06%	.34%	.15%
Conjunctivitis and Blepharitis	.7%	1.47%	.7%	1.1%	1.9%
Scabies (itch)	.1%	.1%	.06%	.45%	.52%

This does not account for all the minor ailments, however, because the majority are found by the School Nurses at their daily visits, or excluded by the teachers before the routine inspection by the Doctor.

Some further remarks on ringworm will be found on page 47.

(c) Tonsils and Adenoids.

Altogether, 220 children (5.5%) were referred for treatment of defects of the nose and throat, compared with 361 (9.4%) the previous year, showing a large reduction.

Further particulars of these cases are given on page 28.

(d) Enlarged Cervical Glands.

Six cases requiring treatment were discovered, and 2 cases were kept under observation.

No cases of tubercular glands in the neck were found.

One would have expected that with the big diminution in the incidence of verminous heads and impetigo there would have been a decrease in the number of cases of enlarged cervical glands. This is not the case, however, as will be seen from the following comparison for the past five years :—

							Enlarged Cervical Glands.
1920	...	...	...	...	...	...	55(1.4%)
1921	...	...	...	...	...	...	80(1.6%)
1922	...	...	...	...	...	...	83(1.8%)
1923	...	...	...	...	...	...	78(2.06%)
1924	...	...	...	...	...	...	82(2.05%)

I am at a loss to explain this, unless it is due to an alteration in the standard of inspection. We are, however, keeping the matter under observation.

(e) Tuberculosis.

One child who was suspected to be suffering from early tuberculosis of the lungs was referred for special treatment.

A better idea of the real amount of tuberculosis in Warrington among school children is to be gathered from the notifications received under the Public Health Tuberculosis Regulations, 1912.

The following table shows the number of children suffering from the different forms of the disease, who were to our knowledge living in the Borough on the 31st December, 1924 :—

					Attending school		Not attending school		Total.
					Males	Females	Males	Females	
Tuberculosis of Lungs	....	....			29	9	10	3	51
„ „ Glands	....	....			31	25	3	3	62
„ „ Peritoneum	....	....			11	3	5	4	23
„ „ Skin	....	....			—	1	—	—	1
„ „ Spine	....	....			3	2	5	1	11
„ „ Hip	....	....			6	1	1	2	10
„ „ Ankle	....	....			1	—	—	—	1
„ „ Knee	....	....			1	2	1	—	4
„ „ Foot	....	....			1	—	—	—	1
„ „ Sternum	....	....			1	—	—	—	1
„ „ Ribs	....	....			1	1	—	—	2
„ „ Elbow	....	....			1	1	—	1	3
„ „ Tibia	....	....			1	—	—	—	1
„ „ Brain	....	....			1	—	2	—	3
„ „ Finger and Hand	....	....			—	1	—	—	1
„ „ Abscesses : Jaw,									
„ „ „ Lumbar	....	....			1	2	—	1	4
„ „ „ Bladder & Kidney	....	....			2	—	—	—	2
Totals	....	....			91	48	27	15	181

Any children suspected to be suffering from early tuberculosis of the lungs were further examined at the Clinic, and, if necessary,

referred to the Tuberculosis Department to be kept under observation (see page 35) for treatment.

(f) Skin Disease.

Reference is made under Minor Ailments to the cases of impetigo, ringworm and scabies discovered.

(g) External Eye Diseases.

There were 23 cases of blepharitis (inflammation of the edges of the eyelid) compared with 42 the year before, and also a decrease in the number of cases of conjunctivitis, 6 ($\cdot 15\%$) in 1924, compared with 14 ($\cdot 37\%$) in 1923.

(h) Vision.

The eyesight of boys and girls in the first age group is not tested unless in exceptional circumstances.

The following is a summary of the results found during 1924, compared with the three previous years:—

	1924	1923	1922	1921
Total number of children whose vision was examined	2618	2751	3156	3370
Number of children with normal vision both eyes	1074 (41%)	1143 (41.5%)	1527 (48.3%)	1350 (40%)
Number of children with good vision (not less than 6/9 both eyes)	1021 (38.9%)	951 (34.5%)	1012 (32%)	1302 (38.6%)
Number of children with fair vision (not less than 6/12 and without eyestrain)	117 (4.4%)	179 (6.5%)	181 (5.7%)	181 (5.3%)
Number of children whose vision was corrected by glasses	137 (5.2%)	152 (5.5%)	148 (4.6%)	198 (5.8%)
Number of children requiring treatment	257 (9.8%)	317 (11.5%)	276 (8.7%)	334 (9.9%)
Number of children whose vision cannot be improved by glasses	12 ($\cdot 4\%$)	9 ($\cdot 3\%$)	12 ($\cdot 3\%$)	5 ($\cdot 1\%$)

From this it is evident that the results found are fairly constant.

(i) Ear Disease and Hearing.

65 cases of aural discharge were found at Routine Inspection. 3 cases of otitis media were found and kept under observation.

(j) Dental Defect.

The School Medical Officers refers to the Dental Officer for treatment all children with four or more decayed teeth, or any children who are obviously suffering from lack of attention to the mouth.

During 1924 only 13 such cases were discovered.

Some statistics are given on page 31 showing the diminution yearly in the number of serious cases of carious teeth found by the S.M.O.

This is no doubt due to the repeated dental inspections and treatment, and possibly to a slight extent to the work of the Welfare Centres, although hitherto there has been no marked improvement in the teeth of "entrants."

(k) Crippling Defects.

2 cases of heart disease were discovered, and 1 child was kept under special observation on this account. 6 cases of anæmia and 7 of chorea (St. Vitus' Dance) were found during Routine Inspection.

(l) Nutrition.

The following table summarises the findings of medical inspection as regards nutrition :—

<i>Entrants--</i>				Number examined.	Above Normal. normal.	Below normal.	Markedly defective.	
Boys	Age 5	...	...	542	5	520	16	1
„	„ 6	...	...	152	—	140	11	1
„	„ 7	...	...	20	1	18	1	—
Girls	„ 5	...	...	478	7	450	19	2
„	„ 6	...	...	136	2	122	11	1
„	„ 7	...	...	16	—	16	—	—
<i>Intermediate—</i>								
Boys	Age 8	...	...	613	2	541	62	8
„	„ 9	...	...	46	—	38	6	2
Girls	„ 8	...	...	628	6	570	48	4
„	„ 9	...	...	49	—	44	4	1
<i>Leavers—</i>								
Boys	Age 13	...	...	621	6	547	58	10
„	„ 14	...	...	27	—	25	2	—
Girls	„ 13	...	...	615	23	527	58	7
„	„ 14	...	...	40	3	32	4	1
Totals		...	...	3983	55	3590	300	38
Percentage		...	...		1.3%	90.1%	7.5%	.9%

There were, therefore, 38 children found suffering from malnutrition in a more or less marked degree, and were followed up as in previous years.

A large number of children showing these defects were recommended for convalescent treatment through the United Services Fund.

The following table shows :—

			The Average Heights and Weights.									
			Height.				Weight.					
			Boys.		Girls.		Boys.			Girls.		
<i>Entrants—</i>			ft.	ins.	ft.	ins.	st.	lbs.	ozs.	st.	lbs.	ozs.
5 years	...	...	3	4.4	3	4.3	2	10	4.6	2	8	12
6 years	...	...	3	6.3	3	6.6	2	13	0.1	2	11	7.5
7 years	...	...	3	7.5	3	7	3	1	5.4	2	12	3.5
<i>Intermediate—</i>												
8 years	...	...	3	9.9	3	9.7	3	6	2.2	3	4	4.5
9 years	...	...	4	0.4	3	10.9	3	10	5.1	3	7	4.2
<i>Leaver—</i>												
13 years	...	...	4	6.7	4	6.7	5	0	6.4	5	2	15.9
14 years	...	...	4	7.9	4	8.8	5	4	12.5	5	11	3

(m) **Other Defects.**

The other defects found, 35 in all, at the Routine Inspections, and 8 at Special Inspections, mentioned at the foot of Table II., consisted of :—

Routine Inspections—

Hernia	...	...	...	...	...	...	1
Adenitis	.....	...	...	...	...	...	1
Debility	...	...	...	...	...	...	1
Enlarged Thyroid	...	...	...	...	...	...	2
Rash	...	...	...	...	...	...	1
Sore Throat	...	...	...	...	...	...	5
Chicken Pox	...	...	...	...	...	...	2
Feverish	...	...	...	...	...	...	1
Measles	...	...	...	...	...	...	1
German Measles	...	...	...	...	...	...	1
Defective Clothing	...	...	...	...	...	...	7
Defective Footgear	...	...	...	...	...	...	12

35

Special Inspections—

Hernia	...	...	...	...	...	...	1
Enlarged Thyroid	...	...	...	...	...	...	1
Debility	...	...	...	...	...	...	1
Measles	...	...	...	...	...	...	1
Sore Throat	...	...	...	...	...	...	3
Defective Clothing	...	...	...	...	...	...	1

8

The incidence of the above defects is about the average.

Exclusions.—All children suffering from contagious disease who may be a danger to the other children, and all cases in which the condition necessitates absence from school are at once excluded by the A.S.M.O. at the time of his inspections. Slight cases are not excluded, but referred for treatment to the Nurses at their bi-weekly visits. The following are the cases excluded during 1924:—

<i>Elementary Schools—</i>						For treatment in School by Excluded. School Nurse.	
Uncleanliness—Head	...	...	...	...	...	15	84
Body	...	...	...	...	...	4	99
Ringworm—Head	...	..	...	...	...	5	—
Body	...	...	...	...	...	3	1
Scabies	...	...	...	...	...	6	1
Impetigo	...	...	...	...	...	3	22
Other Skin Diseases	...	...	...	...	...	2	16
Blepharitis	...	...	...	...	...	4	27
Conjunctivitis	...	...	...	...	...	2	6
Corneal Ulcer	...	...	...	...	...	2	—
Stye	...	...	...	...	...	—	3
Aural Discharge and Wax in Ear	...	...	...	...	...	6	92
Sore Throat	...	...	...	...	...	8	—
Chicken Pox	...	...	...	...	...	2	—
Enlarged Cervical Glands (suppurating)	...	...	...	...	...	1	—
German Measles	...	...	...	...	...	1	—
Measles	...	...	...	...	...	2	—
Feverish	...	...	...	...	...	1	—
Rash	...	...	...	...	...	1	—
Defective Clothing	...	...	...	...	...	—	8
Defective Footgear	...	...	...	...	...	—	12
						68	371
The foregoing refers to defects and the actual number of children affected was ...						62	351

Further examination of cases selected at the Inspections in the Schools.

The further examination of certain cases is made at the Inspection Clinic when necessary. These cases consist of children whom it is impossible to examine thoroughly during the Routine examination.

In 1924 there were 584 such examinations made of 532 children, compared with 485 examinations of 431 children the year before. When a defect was discovered it was entered on the schedule card and has been included in the foregoing statistics as though found at the original Routine Inspection.

Other Medical Inspection Work.

In addition to the Routine inspection work and the examinations of children in the schools in the mornings, a large amount of work is done by the School Medical Officer at the Clinic every afternoon.

6.—INFECTIOUS DISEASES.

The measures taken to prevent the spread of infectious disease have been the same as in previous years.

The daily visitation of schools by the nurses has assisted this work considerably.

The number of cases of **Notifiable** infectious disease occurring among school children during 1924 is shown in the following table, compared with the three previous years :—

Year	Scarlet Fever	Diph- theria	Enteric Fever	Pulmon- ary Tuber- culosis	Other Tuber- cular Diseases
1921	196	48	—	16	37
1922	242	14	2	14	29
1923	110	22	2	14	22
1924	198	26	2	10	23

It will be seen that there was an increase in the number of cases of scarlet fever. The incidence of the disease, however, was not marked in any particular quarter of the year.

The number of cases of diphtheria notified was slightly in excess of the last two years, but with these exceptions, was the lowest for the last sixteen years.

The next table shows the number of cases of **Non-Notifiable** infectious disease, although this does not represent the total number of cases occurring in the town among school children, but only those that came to our notice :—

Year	Whooping cough cases	Chicken- pox cases	Mumps cases	Sore throat cases	Measles cases	German Measles cases
1921	417	283	175	652	277	8
1922	120	418	681	444	796	—
1923	268	416	371	334	540	5
1924	56	272	65	207	559	233

The number of cases of measles coming to our notice was very similar to last year, distribution being heaviest over the last three quarters of the year.

Of German measles 233 cases came to our notice 2,30 of these being in the first half of the year. This number is greater than in any year since 1913.

There were decreases in the number of cases of whooping cough, chickenpox and mumps, the figures being considerably below those of the last few years.

School Closure was not resorted to as a preventive measure for any outbreak of infectious disease in 1924 [Article 45 (b) and 57 of the Code].

Closure is resorted to only in very exceptional circumstances, because as soon as the schools are closed one of our most valuable sources of information regarding sickness among the child population is cut off.

In order to minimise as far as possible the risk of conveying infection to school certain children are referred daily to the Medical Officer of Health. These cases consist of

- convalescents from infectious disease ;
- contacts with infectious disease ;
- children who are suspected of infectious disease ;
- children suffering from sore throats ;

and the numbers dealt with in 1924 are shown in the next table :—

CHILDREN EXAMINED BY MEDICAL OFFICER OF HEALTH AS TO FREEDOM FROM INFECTION.

Disease	Number of Examinations	Cases Detected	
		Scarlet fever	Diphtheria
SCARLET FEVER			
(Convalescents examined as to their fitness to return to School)	203	—	—
DIPHTHERIA Ditto.	27	—	—
CONTACTS with cases of Diphtheria examined previous to being allowed to attend School after case removed to Hospital	42	—	—
SORE THROATS (examined previous to being allowed to attend School)....	173	1	—
Totals	445	1	—

Deaths from Infectious Diseases and all other causes among children of school age during the past 9 years are given in the following table :—

Cause of death	1916	1917	1918	1919	1920	1921	1922	1923	1924
Scarlet Fever	—	—	2	—	1	—	1	—	3
Diphtheria	3	1	3	8	3	—	1	2	1
Enteric Fever	—	—	—	—	—	—	—	—	—
Measles	1	5	—	—	1	—	—	1	—
Whooping Cough	2	—	4	—	—	2	—	—	—
Diarrhœa	—	—	—	—	—	—	—	—	2
Tuberculosis of Lungs	13	9	4	7	2	5	1	6	3
Other Tubercular Diseases	—	6	5	6	8	6	2	4	2
Influenza	—	—	26	11	3	1	1	1	3
Accidents	—	—	—	—	—	—	5	2	3
All other causes	39	37	46	26	31	18	20	13	16
Totals	58	58	90	58	49	32	31	29	33

The following table shows the number of visits paid by the Sanitary Inspectors to the homes of school children in investigating and supervising outbreaks of infectious disease :—

To premises where cases of Scarlet Fever, Enteric Fever or Diphtheria occurred	226
Re-visits to ascertain if contacts with Scarlet Fever, Enteric Fever and Diphtheria were free from infection and fit to return to School	302
Re-visits to cases of Scarlet Fever, Diphtheria or Enteric Fever being treated at home	20
Visits to premises where there were cases of Measles and German Measles	1493
Re-visits to homes where cases of Measles and German Measles are being treated	804
Visits to homes of children reported by Education Department as being absent from School, owing to either Whooping Cough, Chicken-pox, or Mumps	516
Re-visits to homes of children suffering from either Whooping Cough, Chicken-pox, or Mumps	448
Visits to homes of children absent from School with Sore Throat or Suspicious Rash	207
Visits to homes where there were cases of Influenza or Pneumonia	356
Visits to homes of children suffering from Pulmonary and Non-Pulmonary Tuberculosis	741
Total	5113

BACTERIOLOGICAL EXAMINATIONS.

Examinations made for the detection of Diphtheria :—

Year.	Number of Examinations made.		Positive Results.	Negative Results.	
1913	..	200	..	7	.. 193
1914	..	197	..	5	.. 192
1915	..	123	..	6	.. 117
1916	..	195	..	6	.. 189
1917	..	191	..	3	.. 188
1918	..	110	..	1	.. 109
1919	..	96	..	1	.. 95
1920	..	329	..	15	.. 314
1921	..	186	..	11	.. 175
1922	..	177	..	11	.. 166
1923	..	92	..	8	.. 84
1924	..	199	..	30	.. 169

7.—“ FOLLOWING-UP ” OF CHILDREN SUFFERING FROM PHYSICAL DEFECTS AND WORK OF THE SCHOOL NURSES.

The procedure adopted in the following up of the cases to see that the defects found at Routine and other inspections are dealt with promptly and satisfactorily has been explained in former Reports.

The Tables at the end of the Report show the results obtained, but no record is given of the actual number of re-examinations made in each case by the doctor, or of the number of visits paid by the Nurses and School Attendance Officers in advising parents and in offering facilities for treatment.

Only as a last resort are parents summoned to attend before the School Medical Service Committee for not obtaining satisfactory treatment for the children (see page 34).

Work of the School Nurses.

The usual large amount of work has been carried out during the year 1924, in a very thorough manner, both in the Clinic and in the schools by the four Nurses, Miss Mason, Miss Brown, Miss Griffiths and Miss Ritson.

In the Schools.

As described in previous reports, the town has been divided into three districts worked by three of the Nurses alternately. Every school is visited twice weekly (*viz.*, on Mondays and Thursdays, or Tuesdays and Fridays.)

Every child suffering from a minor ailment attending school can be seen, therefore, at least twice a week without any loss of school attendance.

During 1924 in this way they accomplished 34,377 dressings (see page 24).

When necessary, any of these cases that are liable to be contagious are excluded.

Thus, during 1924, there were the following :—

EXCLUSIONS FOR CONTAGIOUS AILMENTS.

					Boys.	Girls.	Total.
Abscess of thigh	...	...	...	...	1	—	1
Aural discharge	...	...	...	...	—	1	1
Conjunctivitis	...	...	...	...	28	31	59
Corneal ulcers	...	...	...	...	—	1	1
Eczema	...	...	...	...	2	1	3
Impetigo (skin)	...	...	...	...	10	23	33
„ (scalp)	...	...	...	...	7	11	18
Pediculosis capitis	...	...	...	...	7	122	129
Ringworm (skin)	...	...	...	...	16	4	20
„ (scalp)	...	...	...	...	7	2	9
Scabies	...	...	...	...	1	5	6
Uncleanliness	...	...	...	...	10	—	10
					89	201	290

Our supervision of outbreaks of infectious disease is facilitated and 15 special visits were paid by the Nurses to the schools in this connection last year, when they made the following :—

EXCLUSIONS FOR INFECTIOUS CONDITIONS.

					Boys.	Girls.	Total.
Chicken-pox	...	...	...	...	7	4	11
Measles	...	...	...	...	5	3	8
Mumps	...	...	...	...	1	—	1
Rash	...	...	...	...	2	1	3
Scarlet Fever	...	...	...	...	1	—	1
Sore Throat	..	...	...	...	5	13	18
					21	21	42

In addition, they submitted a list of 187 children for **further medical examination** on account of the following conditions :—

	Boys	Girls	Total
Enlarged Tonsils	22	26	48
Adenoids	8	2	10
Spectacles Broken	17	18	35
„ Lost	4	—	4
„ Unsuitable	4	2	6
„ Not being worn	—	4	4
Defective vision	14	11	25
Squint	16	25	41
Incontinence	1	—	1
Heart	—	1	1
Malnutrition	—	1	1
Mouth Breathing	4	—	4
Nasal Catarrh	1	—	1
Enlarged Thyroid	1	1	2
	92	91	183

Their work in the **School Clinic** is referred to on page 22, and apart from this the following is a summary of the activities of the Nurses during 1924 :—

Visits paid to Schools to treat minor ailments	1813
No. of Dressings in School (page 24)	34377
Visits to homes of children (in many cases assisting with treatment)	869
Attendances at Routine Medical Inspection in the Schools with the A.S.M.O.	145
Notices sent to teachers with reference to excluded children	585
“ Surprise Visits ” to Schools (see page 33)	275
Extra visits <i>re</i> infectious disease	15
Administered nasal douches in cases of tonsils and adenoids after operation	546
Assisted in the Dental Clinic when necessary.	

8.—TREATMENT OF DEFECTS OF CHILDREN DURING 1924.

The Local Authority has provided facilities for the treatment of various ailments, and a list of the days and hours of attendance at the various Clinics is given on page 2.

Use is made of all existing agencies, and, in addition, a large number of cases are referred for treatment in their own homes. Whenever the circumstances warrant it, cases are induced to obtain treatment from a private medical practitioner.

A.—Minor Ailments.

The cases of minor ailments that attended the School Clinic for examination by the Medical Officer were as follows :—

	Boys	Girls	Total
Ringworm (Scalp)	52	24	76
„ (Skin)	17	17	34
Conjunctivitis	70	71	141
Blepharitis	6	7	13
Aural Discharge	5	10	15
Impetigo (Scalp)	25	81	106
„ (Skin)	28	33	61
Scabies	11	11	22
Pediculosis (Scalp)	22	261	283
„ (Body)	—	1	1
Eczema	4	15	19
Miscellaneous	144	139	283
	384	670	1054

There is a reduction in these cases from the previous years, when the figures were 417 boys and 696 girls, a total of 1,113. A reduction occurs in all the ailments except ringworm, conjunctivitis and impetigo (scalp).

These cases were dealt with as follows :—

	Boys	Girls	Total
Referred to private practitioners	39	51	90
„ „ Infirmary	70	98	168
„ „ School Clinic (excluded from school)	175	195	370
„ „ treatment at home	35	261	296
Found fit for school on first attendance	65	65	130
	384	670	1054

Compared with 1923, a few more cases were referred to general practitioners for treatment.

The cases referred to and treated by private practitioners were :—

	Boys.	Girls.	Total.
Ringworm (Scalp) ...	5	1	6
„ (Skin) ...	1	1	2
Conjunctivitis ...	4	5	9
Impetigo (Scalp) ..	5	3	8
„ (Skin) ...	—	2	2
Scabies ...	1	—	1
Pediculosis (Head) ...	—	4	4
Eczema ...	—	2	2
Miscellaneous ...	23	33	56
Totals ...	39	51	90

It is safe to say that the majority of the above cases would not have sought medical advice for these minor ailments unless the necessity for such action had been pointed out by the School Medical Service.

1.—Treatment at the School Clinic.

In the next table will be found a summary of the cases treated in the School Clinic, and included among them are 7 cases (4 boys and 3 girls) who were dealt with out of school hours, as there was no risk to the patient or to other children in allowing them to attend school.

Number of Cases Treated at the Clinic.

Disease	No. of cases treated in School Clinic	Total No. of attendances	Average No. of attendances per case	No. of days under treatment	Average No. of days under treatment
Aural Discharge	7	44	6.2	53	7.5
Ringworm, Skin	27	169	6.2	228	8.4
„ Scalp	64	2913	45.5	4650	72.5
Conjunctivitis	107	594	5.5	749	7.0
Impetigo, Skin	53	416	7.8	535	10.09
„ Scalp	87	773	8.8	1123	12.9
Blepharitis, etc.	8	34	4.2	37	4.6
Miscellaneous	17	59	3.4	69	4.05
After-School Cases	7	20	2.8	20	2.8
Total	377	5022	—	—	—

This figure includes the 7 cases, dressed after school hours as well as the 370 children who were excluded from school.

The average number of days required for treatment is similar to that of former years in spite of the fact that the cases dealt with at the Clinic are on the whole more severe than previously—the milder cases all being treated at the Schools.

The marked diminution in the numbers attending the Clinic in recent years owing to the introduction of the system under which our Nurses visit the Schools is shown by the following figures :—

	No. of Children	No. of Attendances
1914	1973	16391
1915	3721	36531
1916	3631	36919
1917	3802	33378
1918	5124	39991
1919	5481	32249
1920	3500	26853
1921	3011	22203
1922	560	5029
1923	349	4150
1924	377	5022

Not only are the cases cured more rapidly, but there is much less interference with the education of the child owing to irregular attendance, and incidentally there is a large saving of the grant received from the State.

Ringworm of the Scalp.

Some remarks on the treatment of this troublesome condition will be found on page 47.

X-Ray Treatment during 1924.

No. of cases dealt with	....	....	23 (14 Boys, 9 Girls)
No. of exposures necessary	....	....	108
Total cost of the work	....	....	£45/13/- *

* A small proportion of this is recovered from parents.

Our arrangements for providing X-ray treatment for ringworm of the scalp were fully detailed in the Report for 1921.

2.—Treatment in the Schools.

The system under which the Nurses carry out this work has been detailed in previous Reports. At her daily visit all children suffering from any ailment are sent out to the Nurse for treatment.

When all have received attention the classes are visited if there is time, and each scholar comes under review.

All new admissions to school are seen by the Nurse at her first visit.

The benefit derived by the children from this closer supervision is marked.

The large amount of work done by the Nurses in 1924 will be seen from the following table :—

NUMBER OF DRESSINGS IN THE SCHOOLS.

				Boys.	Girls
Impetigo (Scalp)	....	....	....	1030	471
„ (Skin)	....	....	....	9355	6845
Eczema	....	....	....	3686	2748
Eyes	....	....	....	2955	2021
Ears	....	....	....	3412	1814
Totals	....	....		20438	13899 = 34337

As far as possible these dressings are carried out in one department only in each school, in order to save the Nurses' time in packing and unpacking the surgical bags. A screen is provided in the few instances in which the work has to be done in a classroom.

In many cases the Nurse finds a mother awaiting her at the school to seek information.

The Nurses also kept many slight cases of pediculosis of the scalp under observation, and gave them instructions.

In carrying out this work the Nurses paid 1,813 visits to the schools, or, on an average of 78·8 per school ; an increase over the previous year, when the total visits were 1,633. This does not include the " Surprise Visits " (see page 33).

They excluded 39 children suffering from infectious conditions. viz. :—

			Boys	Girls	Total
Chickenpox	....	....	7	4	= 11
Measles	....	....	5	3	= 8
Mumps	....	....	1	—	= 1
Scarlet fever	....	....	1	—	= 1
Sore throat	....	....	5	13	= 18
					39

Any exceptional children discovered at these visits were referred for further examination to the A.S.M.O.

From the following Return, it is evident that a very large saving in School Attendance Grant has been effected through the adoption of the system of Treatment in the Schools.

The total number of attendances lost in 1924 in consequence of contagious diseases was 18,227, but this was 86,226 less than in 1918 : in fact, less than one-fifth of the number then lost.

RETURN showing the number of children affected and the number of school attendances lost in consequence of contagious diseases during the years 1916 to 1924.

	RINGWORM.		IMPETIGO.		CONJUNCTIVITIS.		AURAL DISCHARGE.		UNCLEANLINESS		OTHER AILMENTS		TOTALS.	
	Chil-dren.	Attend-ances.	Chil-dren.	Attend-ances.	Chil-dren.	Attend-ances.	Chil-dren.	Attend-ances.	Chil-dren.	Attend-ances.	Chil-dren.	Attend-ances.	Chil-dren.	Attend-ances.
1916	282	10324	1195	28022	656	17082	134	3411	313	4483	654	17193	3234	80515
1917	293	9751	1356	31707	435	9494	79	1702	275	3434	652	13617	3090	69705
1918	266	10421	1641	39482	1503	30737	121	2171	354	7083	660	14559	4545	104453
1919	271	9847	1711	36296	775	17023	163	2880	479	6495	480	10851	3879	83392
1920	603	21091	1277	26427	471	8904	87	1045	729	6816	754	18672	3921	82955
1921	296	18763	878	15584	423	7527	69	997	662	7069	672	15896	3000	65836
1922	102	5828	258	4880	198	3687	8	157	526	5838	340	10072	1432	30462
1923	104	4490	218	4773	138	2563	8	158	281	2892	225	7265	974	22141
1924	136	6198	199	4286	150	2588	2	14	229	2172	122	2969	838	18227

3.—Treatment in the Homes.

The aim of all modern public health work is essentially educational, and should tend to strengthen self-reliance. The question of the possibility of lessening parental or personal responsibility in connection with school medical work is constantly borne in mind, and whenever it is thought that the cases are suitable and the children can receive adequate attention they are referred for treatment in their own homes under the supervision of the Nurses.

During 1924 the following cases were dealt with in this manner :—

	Total	Boys	Girls
Pediculosis of the head	239	8	231
Scabies	21	10	19
Miscellaneous	36	17	11
	296	35	261

Amongst the miscellaneous are such cases as ringworm of the body, herpes, eczema and aural discharge.

In many cases the Nurse finds a mother awaiting her at the school to seek information.

The treatment of minor ailments in the homes by the mothers is beginning to show an improvement, and cases are being dealt with earlier, with more intelligence than formerly.

B.—Treatment of Visual Defects.

Our arrangements (detailed in the 1917 Report) with the Warington Infirmary for dealing with eye, nose and throat defects were continued during the year.

The Board of Management applied for an increased payment for the work, and it was decided that in future the payment would be £3/3/- per session for dealing with 8 cases of refraction.

From the table on page 58 it will be observed that 600 defects were treated :—406 at the Infirmary under our scheme ; 78 by general practitioners ; and 116 in other ways (opticians, etc., including 22 repairs). Total 600.

This compares favourably with the 521 cases dealt with the previous year.

A certain amount of arrears of work was overtaken during this period, and it is gratifying to note that although 213 cases that had not received treatment were brought forward from 1923, we

onyl had 53 carried forward into 1925. Of this number 20 cases had already received prescriptions from the Infirmary but had not yet obtained spectacles.

The work, therefore, in this branch, has been brought up-to-date for the first time for several years.

In order to accomplish this it was necessary for an extra weekly session to be held during 3 months of the year.

I am indebted to Dr. Fox, who carries out this work at the Infirmary, for the following summary of cases dealt with in 1924 :—

SUMMARY OF REFRACTION CASES DEALT WITH IN 1924 :—

	Hyper- metropia	Hyper- metropic Astig- matism	Myopia	Myopic Astig- matism	Mixed Astig- matism	Total
Vision improved	101	134	28	46	8	317
Vision not improved	45	—	—	—	—	45
Defective vision not due to errors of refraction	31	—	—	—	—	31
Normal vision, or 6/9	13	—	—	—	—	13
Totals	190	134	28	46	8	406

	Cases
Squint	50
Nystagmus	3
Corneal nebulæ	4
Congenital choroidal atropy	1
Congenital coloboma	1
High myopia	2

Squint Operations.—4 cases (3 boys and 1 girl) were operated on at the Infirmary. 3 of these were cases which had been examined in previous years, and after they had been wearing glasses were re-examined at the Infirmary and operation advised. One girl was operated on for this defect by a private practitioner.

Spectacles.

No. of pairs of Spectacles provided by the Local Education Authority in 1924	....	....	....	....	....	....	340
No. of pairs of Spectacles repaired	....	....	....	....	....	....	2
Cost of Spectacles—Spherical	....	....	....	....	per pair,	3/9	
„ „ Cylindrical and Compound	....	....	....	....	„	5/9	

The total cost of supplying these is recovered from the parents or guardians.

In addition to the above, 23 children were provided with spectacles during the year by the Board of Guardians, in cases where the parents were in receipt of relief, and unable to pay for the spectacles.

It will be noted that the number of spectacles provided does not always tally with the number prescribed, but this is, of course, due to the fact that there are a certain number of breakages to be replaced each year.

C.—Treatment of Defects of Nose and Throat.

From Table II. (page 53) it will be observed that the following defects of the nose and throat were referred for treatment :—

	At routine inspections.	At "special" examinations.
Enlarged Tonsils	131	37
Adenoids	62	60
Enlarged Tonsils and Adenoids	17	23
	210	120
	330	

This treatment is not necessarily operative in every instance and only where the child shows signs of deafness, of marked nasal obstruction, or other serious defect is an operation advised.

In Table IV., Group III. (page 59), we find the number of cases treated during 1924 as follows :—

Operative Treatment—

(a) At the Infirmary under our scheme	169
(b) By private Practitioners	12
	181
Other forms of treatment	169
	350

An alteration in our terms of payment to the Institution was made, and the arrangement now is :—

For the Operative Treatment of Cases of Enlarged Tonsils and Adenoids—
£5 5s. per session of not less than 4 or more than 6 cases.

For Cases retained in the Institution after Operation—7/6 per day.

I am indebted to Dr. Binns, who carries out this work for us at the Infirmary, for the following statistics :—

SUMMARY OF NOSE AND THROAT CASES DEALT WITH IN 1924.

Defect.	Satisfactory after operation.		Unsatisfactory after operation.		Totals.		Grand Total.
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	
Tonsils	19	23	2	1	21	24	45
Tonsils & Adenoids	39	47	3	3	42	50	92
Adenoids	23	9	1	—	24	9	33
Totals	81	79	6	4	87	83	170

- 1.—3 cases were found to be complicated with true large Nasal Polypi.
- 2.—In cases where suspicion as to the character of the exudation from the excised tonsil arose, a swab of the exudation was sent to the Health Office for Bacteriological examination; two of such cases were found to be diphtheritic and were taken over by the Medical Officer of Health and sent to the Infectious Hospital.
- 3.—A few cases were found to be suffering from offensive Otorrhoea.
- 4.—Between the ages of 5—7 there were 75 children.

„	„	8—11	„	56	„
„	„	12—14	„	36	„
No age noted				3	
				170	

The number of cases operated on each year at the Infirmary under our scheme varies, as is shown in the following table :—

				Tonsils	Adenoids.	Tonsils and Adenoids,	Total.
1924	...	...	...	45	33	92	170
1923	...	...	...	94	24	98	216
1922	...	...	...	123	20	24	167
1921	...	...	...		Unclassified.		183
1920	...	...	...	133	45	27	205
1919	...	...	...	88	62	94	244
1918	...	...	...	81	80	115	276

In Sir George Newman's Report on "The Health of the School Child," for 1923, he outlines certain conditions of a satisfactory scheme for the operative treatment of enlarged tonsils and adenoids.

Dr. Binns and I carefully considered this report as it applied to our own Clinic, and found that we are carrying out practically all the details laid down in the memorandum with the exception of the provision of a suitable conveyance for children from the Institution to their own homes.

The report states, "Travelling by public train, omnibus or tram so shortly after operation is most undesirable, and is a source of distress, and often, infection."

Our cases all remain in bed in the Institution after the operation from noon until 5-30 p.m. and it would not be a difficult matter to arrange for the Health Department Ambulance to take them home at that hour.

After-Treatment of "Tonsil and Adenoid" Cases.

After the operation the child attends from time to time at the School Clinic, where nasal douching is performed in cases requiring it. Altogether 546 such douches were given by the school nurses. As soon as the School Medical Officer thinks it advisable the child

returns to the Infirmary to be seen by the operating Surgeon, and if he is satisfied the case is marked off.

A leaflet on breathing exercises for the child is given to the mother, and she is informed of the importance of seeing that the child breathes through the nose. In addition, a notice is sent to the School informing the Head Teacher of the fact that the operation has been performed, and asking that the child should be corrected for mouth breathing.

D.—Treatment of Dental Defects (see page 59 and 60).

The policy adopted for dealing with dental defects amongst school children in Warrington is for the Dental Officer to begin each year inspecting and treating the 6 to 8-year-olds. As soon as this group is finished he passes on to the higher age-periods, 8 to 9, 9 to 10 years, and so on, for the remainder of the year.

Altogether 17,324 children were inspected, compared with 11,946 the previous year.

The reason for this very large increase in the number of inspections was owing to the fact that fewer children were presented for treatment, and is referred to again later on :—

Age period	1924 Dates					Boys	Girls	Totals
4—7	Jan. 7th	to	31st	....	....	867	861	1728
	Feb. 1st	„	29th	....	....	250	199	449
	Dec. 3rd	„	19th	....	....	826	563	1389
8—10	Jan. 7th	to	31st	....	....	282	294	576
	Feb. 1st	„	29th	....	....	351	315	666
	Mar. 3rd	„	20th	....	....	1017	885	1902
	April 3rd	„	30th	....	....	601	585	1186
	Aug. 27th	„	29th	....	....	158	117	275
	Sept. 1st	„	19th	....	....	983	916	1899
	Oct. 13th	„	24th	....	....	773	378	1151
	Nov. 11th	„	14th	....	....	143	343	486
	Dec. 3rd	„	19th	....	....	35	49	84
11—14	Jan. 7th	to	31st	....	....	—	13	13
	April 3rd	„	30th	....	....	179	55	234
	May 1st	„	30th	....	....	1363	1355	2718
	June 2nd	„	6th	....	....	207	396	603
	July 1st	„	16th	....	....	623	678	1301
Specials						310	354	16,660
								664
								17,324

During 1924 all the children attending the Elementary Schools and the Secondary School have been inspected. The intermediate age group (ages 8, 9 and 10) were examined a second time, and also part of the entrant group.

On an average the Dentist inspects about 70 children per session in the schools and treats about 12 per session at the Clinic.

In addition, all cases found by the Medical Officer at his Routine Inspections to require treatment are referred to the Dentist.

The percentage of carious teeth among the entrants inspected remains fairly constant, although it is to be hoped that the work of the Infant Consultation Centres will, in time, effect an improvement.

The Medical Officer refers for dental treatment any child in whom more than four carious teeth are found at the time of examination.

The following table shows the progressive diminution in the percentage of cases found by him :—

Year.	No. of Children examined at Routine Medical Inspection.			No. referred for dental treatment having 4 or more carious teeth.
1916	...	...	4173	490 = 11.7%
1917	...	...	4294	477 = 11.1%
1918	...	...	3267	193 = 5.9%
1919	...	...	4237	242 = 5.7%
1920	...	...	3813	71 = 1.8%
1921	...	...	4724	48 = 1.01%
1922	...	...	4830	34 = .7%
1923	...	...	4107	*102 = 2.4%
1924	...	...	3983	13 = .32%

* In this year Dr. Crawford was acting locum tenens for about 3½ months and adopted a different standard.

Statistics showing the conditions found and the treatment undertaken, both for children attending the Public Elementary Schools and the Secondary School, will be found in the tables on page 59 and 60.

Out of 13,107 children referred for treatment, 2,913 were presented for treatment, viz., 22.2%.

The percentage treated out of those requiring it for the past four years is as follows :—

1924	22.2%
1923	40.4%
1922	54.3%
1921	52.7%

The falling off in the numbers presented for treatment is due to the attempt to recover payment from parents in certain cases.

For many years all who accepted treatment and required it were dealt with free of charge.

In October, 1923, the following scale of income for free treatment was adopted :—

Amount per head.	Total number in family.	Total income.
15/-	3	45/-
11/3	4	45/-
10/-	5	50/-
9/6	6	57/-
9/-	7	63/-
8/6	8	68/-
8/-	9	72/-
7/6	10	75/-

In May, 1924, this scale was discontinued, and now all receive free treatment when the family income does not exceed £3 per week. Other cases pay 1/- for the complete treatment.

There is not doubt that these scales and the consequent inquiries have deterred many from seeking treatment at the Clinic ; but, apparently, the parents are getting more used to it, and the numbers attending are gradually improving.

The following is the Report on the work by the School Dentist (Mr. Hutchison) :—

TO THE EDUCATION COMMITTEE OF THE COUNTY BOROUGH OF WARRINGTON.

Gentlemen,

I beg to submit my Annual Report on Dental Inspection and treatment of scholars attending Elementary Schools in the Borough for the year 1924.

The number of children inspected by me during the past year was 17,324, being an increase of 5,378 on the previous year. I think to inspect less, and devote more time at the Clinic to treatment would be desirable.

Of those children, 4,217 (24.3%) were found to have sound Dentition, and 13,107 (75.7%) were found to have defective and carious teeth.

The number of parents who desired to take advantage of treatment for their children at the Clinic was 4,626 (35.3%), and the number who declined treatment was 8,481 (64.7%), about 20 of these refusals were treated at the Clinic as specials. The falling off in numbers accepting treatment was in a great measure due to the new regulations which came into operation during the past year when a small charge was made. But of late matters are improving and the numbers are on the increase.

All cases found requiring treatment by the A.S.M.O., urgent or otherwise, were referred to me and dealt with at the Clinic.

4-7.—The large percentage of extraction in this group was unavoidable, as it is the most critical age of transition between Temporary and the eruption of Permanent teeth, while I at the same time give every attention to the permanent molars and arrest decay by careful filling.

8-10.—It is satisfactory to record in this group that there was evidence of previous treatment at the Clinic, and a notable decrease in caries. The constant advice given on the care, in brushing the teeth night and morning is being carried out by a large number of the children.

11-14.—In many of the boys and girls of these ages there were no bad teeth, and I am glad to state that they did undoubtedly leave school equipped with sound teeth.

Secondary School.

In the month of September I visited the above school in the mornings and carefully inspected all the scholars. The conditions found were, on the whole, good and showed cleanliness and that the children had carried out the advice previously given. Of course, there were a few who appeared indifferent, but with a talk to them, I hope on another visit there will be an improvement in these.

The number inspected was 301. I referred 170 for treatment, and of these 39 attended at the Clinic.

I am, gentlemen,

Your obedient Servant,

WM. HUTCHISON,
Surgeon Dentist.

E.—Treatment of Uncleanliness.

The percentage of children suffering from uncleanly or verminous conditions in our schools has never been as low as it is at present. This is all the more noteworthy, not only on account of the amount of overcrowding we have owing to the housing shortage, but also to the fact that the standard adopted in our inspections is higher than ever.

The improvement of recent years is largely due :—

- (a) to the work of the school nurses at the ordinary bi-weekly visits and at the " Surprise " visits.
- (b) the co-operation of the teachers.

One cannot help remarking, however, that the present fashion for "bobbed hair" has also facilitated our work in this direction.

The following are the particulars of the “ Surprise ” visits :—

				1922	1923	1924
Number of Schools in the Borough	...	...	...	23	23	23
Average number of visits per annum paid by Nurses to each School	...	...	...	15	14	12
Total number of examinations made by School Nurses to children	...	...	...	34624	42806	32857
Number of children found unclean (1788)			excluded	131	95	79
Number found suffering from minor ailments (174)	...	...	...	39	25	32

The number of cases that had to be excluded for dirty heads was only 79, compared with 95 the previous year, and 131 in 1922.

A large number of children, however (1,788 compared with 1918 in 1922) were referred for special supervision by the school nurses for slight uncleanliness, but were not excluded from school.

The method adopted for securing cleanliness of children excluded from school with verminous heads was detailed in my last Report.

Legal Proceedings are taken when necessary under the School Attendance Byelaws.

The progressive diminution of recent years of the numbers summoned before the Committee testifies to the great improvement that has taken place.

It is noteworthy that not a single prosecution was found necessary during the last two years :—

			1924	1923	1922	1921	1920
No. of case of Ped. Cap. summoned before the Committee	...	...	20	27	81	98	86
No. of cases prosecuted	...	...	nil	nil	7	4	7
No. of convictions obtained	...	...	—	—	5	3	7

F.—Treatment of all other Defects.

The other defects found at routine inspection received consideration as follows :—

	Referred for treatment	Treated	Still under observation	Left School
ELEMENTARY SCHOOLS—				
Malnutrition	68	16	50	2
Bronchitis	92	58	34	—
Anæmia	11	6	5	—
Debility	4	4	—	—
Enlarged Cervical Glands	5	3	2	—
Enlarged Thyroid	3	3	—	—
Nasal Catarrh	1	—	—	1
Cervical Adenitis	2	1	1	—
Hernia	3	1	2	—
Rickets	1	—	1	—
Knock Knee	1	—	1	—
Totals	191	92	96	3

Cases of infectious disease and tuberculosis are not mentioned in the above table, as these diseases are referred to the Health Department as soon as they are discovered.

Bronchitis, as usual, makes up a very large proportion of the total, and next to that comes malnutrition.

In the first instance we advise these cases to receive treatment from their own doctor.

If the parents cannot afford this we assist them in obtaining a recommendation for attendance at the local Infirmary, or, if, necessary from the Poor Law doctors.

In a few cases, where the parents were unable to bear the expense and the child had to be taken to special Institutions in Liverpool or Manchester, they were assisted by the Guild of Help.

During the past year, too, the United Services Fund has rendered valuable service in providing extra nourishment, clothing and institutional treatment for many cases.

All cases are ultimately re-examined by the School Medical Officer, and only marked off the " follow-up " list when he is satisfied that no further beneficial results can result from treatment.

Malnutrition cases are kept in a special register and frequently re-examined, whilst all children suffering from or suspected to be suffering from **Tuberculosis** are referred to and kept under observation by the Medical Officer of Health.

During 1924 the following cases were examined at the Health Office, where a record was kept of their weight and the physical signs entered on a special chart :—

	No. of Cases.	No. of Examinations.
Tuberculosis of Lungs	30	81
Suspected Tuberculosis of Lungs and Contacts	182	251
Tuberculosis of Glands	30	52
,, ,, Spine	1	5
,, ,, Hip	1	8
,, ,, Peritoneum	14	36
,, ,, Knee	1	1
,, ,, Hand	1	6
,, ,, Bladder	1	3
,, ,, Skin	1	1
,, ,, Foot	1	2
,, ,, Elbow	1	2
,, ,, Brain	2	6
,, ,, Lumbar Abscess	1	4
	267	458

Selected cases receive treatment at our Sanatorium at Weaverham, and during 1924 31 children of school age were dealt with there.

5 deaths from tuberculosis occurred during the year among children (lungs 3, meningitis 1, spine 1).

9.—OPEN AIR EDUCATION.

There can be no doubt as to the good results achieved from the education of tubercular and weakly children on strictly open-air principles, and if fresh air proves of such benefit to the ailing it must surely be of value to the healthy.

The ailing children who would chiefly attend a special school would be those suffering from anæmia, general debility, quiescent pulmonary tuberculosis, other non-infectious tubercular conditions (*e.g.*, glands, abdomen, etc.), bronchitis and asthma, St. Vitus' Dance, malnutrition, infantile paralysis, heart diseases and convalescents from pneumonia.

It is very desirable that more provision for open-air education should be made, and it is to be hoped that this will be taken into consideration in planning all the new schools.

There is at present for elementary school children in Warrington no open-air day or residential school, neither are there any open-air classrooms in connection with the ordinary schools.

So far as possible the teachers make use of the playgrounds and sheds as much as they can in the summer time in fine weather. In addition, there are the casual visits to the parks for Nature lessons.

10.—PHYSICAL TRAINING.

No Area Organiser has been appointed, and usually each teacher is responsible for his or her own class.

As far as possible every school child undergoes physical training for a period of twenty minutes each day. The syllabus is based on the Syllabus of Physical Training for Schools issued by the Board of Education in 1919. The Town Hall, Parks and Baths Committee have recently given permission for the use of Bank Park for organised games during school hours.

A few Teachers have attended Summer Schools for Physical Training, and thus become acquainted with the most recent methods of teaching the subject.

In addition to the physical education in school hours, the teachers have organised competitions in Football (Association and Rugby), Netball, Rounders, Hockey, and Swimming, which take place outside of school hours and are participated in by all the schools.

11.—PROVISION OF MEALS.

It has not been found necessary during recent years to exercise our powers under the Provision of Meals Acts, 1906-14.

The last time that meals were provided for school children was in the year 1914.

The School Medical Officer approved of the suitability of the dietary and the general arrangements made, and in many instances selected the children.

12.—SCHOOL BATHS.

Baths have been installed in three of the schools in the town—at Bolton Council School, at Evelyn Street Council School, and at Oakwood Avenue School.

Full use was made during 1923 of the facilities afforded, and great benefit would undoubtedly accrue to the children in other areas if bathing accommodation was provided.

NUMBER OF CHILDREN USING THE SCHOOL BATHS.

			Boys.	Girls.	Infants.
Bolton	...	...	200	120	45 (every week)
Evelyn Street	...	...	320	290	180 (every fortnight)
Oakwood Avenue	...	...	210	110	25 (every week)
Totals	...	...	<u>730</u>	<u>520</u>	<u>250 = 1,500</u>

All the children in attendance in those classes in which the average age of the scholars is between 11 and 11½ years attend the public swimming baths during school hours.

These children attend twice each week for a period of about eight weeks, but no child is allowed to attend who is suffering from any physical defect which would result in exposure of either himself or other children to undue risks.

During a full normal season about 950 boys and 600 girls receive instruction.

13.—CO-OPERATION OF PARENTS.

In 1,239 instances (31.1%) out of 3,983 examinations at Routine medical inspections, one or both of the parents were present.

These attendances vary greatly according to sex and age of the child being examined, and ranged from none for boys of 14 years of age to 58.57% of the girls aged 5 years old.

In the majority of cases the parents act at once on the advice offered, and co-operate willingly in obtaining adequate attention for their children.

The following table is interesting as showing for the past seven years how parents have consented to have operative treatment granted to their children for enlarged tonsils and adenoids :—

	No. of cases in which operation was performed	No. in which operation was consented to early.	No. in which operation was consented to later.	No. referred to Committee.
1918	... 135	92 (68.1%)	43 (31.9%)	1
1919	... 233	174 (74.6%)	59 (25.4%)	10
1920	... 113	86 (76.1%)	27 (23.9%)	6
1921	... 133	108 (81.2%)	25 (18.8%)	14
1922	... 155	123 (79.3%)	32 (20.7%)	4
1923	... 136	120 (88.9%)	16 (11.1%)	1
1924	... 175	150 (85.6%)	25 (14.4%)	1

It is noteworthy that, whereas in 1918 only 68.1% agreed to have the operation as soon as the necessity was pointed out, in 1924 85.6% consented.

Committee Cases and Prosecutions.

Only as a last resort are parents summoned to appear before the School Medical Service Sub-Committee. During 1924 this was found necessary for the following cases :—

Failure to complete payments for Spectacles	...	...	17
Enlarged Tonsils	...	...	1
			18

In none of these cases however was it found necessary to prosecute, as the parents consented to do what was required after interviewing the Committee.

The steps taken for dealing with uncleanness are given on page 33.

14.—CO-OPERATION OF TEACHERS

(AND TEACHING OF HYGIENE).

The success of the work of the School Medical Service is due in large measure to the help given by the Teachers who co-operate, almost without exception, both willingly and usefully at medical inspections, and in the treatment and after-care of the children.

This is more than ever evident at the present time when so much treatment is being carried out in the schools by the Nurses, for without the ready assistance of the Teachers this would not have proved the success that it has.

In addition, however, apart from the valuable hygienic teaching constantly taking place in the schools, the teachers have proved of great service at other times to the Local Health Authority in furthering health propaganda work.

On the occasion of any special outbreak of infectious disease they are supplied, through the Director of Education, with leaflets dealing with the matter, and after specially informing the pupils of the essential details, they see that each scholar is supplied with a leaflet to take home to the parents.

Similarly just before the summer vacation each year a special lesson is given to the children on the "Fly Nuisance," and a special leaflet is distributed. During "Health Week" in 1924, a special effort was made to appeal to school children, and with the consent of the Education Committee 3 meetings were held in the Parr Hall, at which not less than 3,000 children attended each afternoon.

Mr. Bowen Partington delivered short health talks, these being followed by special cinematograph films specially adapted for children and dealing with such subjects as "The Origin of Life," "The Danger from Flies," and "Care of the Teeth."

15.—CO-OPERATION OF SCHOOL ATTENDANCE OFFICERS.

I have alluded in previous years to the useful services of the School Attendance Officers, and need only repeat that they have again rendered every assistance possible to our Department.

16.—CO-OPERATION OF VOLUNTARY BODIES.

The branches of voluntary organisations in the town such as the Guild of Social Service, National Society for the Prevention of Cruelty to Children, and the Warrington and District Society for the

Blind, work in close co-operation with the School Medical Department, and advantage is taken of their services in all cases in which their help is likely to be effective.

The Local Education Authority appoints a representative on the Executive of the West Lancashire Association for the Care of the Mentally Defective, to which body an annual subscription of two guineas is made. This organisation undertakes the visiting and after-care of mentally defective persons in their homes, and quite recently has opened an Occupation Centre for them in the town. (See page 42).

We are also much indebted to the local branch of the United Services Fund, which body provided during last year extra nourishment and special convalescent home treatment for a large number of the children of ex-servicemen.

17.—BLIND, DEAF, DEFECTIVE AND EPILEPTIC CHILDREN.

Arrangements are made for a special examination by the School Medical Officer at the earliest possible date of any child suspected of being defective in any way.

A summary of the exceptional children in the area is given in Table III. (page 55.)

These exceptional children are dealt with as follows :—

- (a) **Blind and Deaf.**—All the children in this category found suitable are sent to special institutions in neighbouring districts, as there are no special schools of this type in the Borough.
- (b) **Physically Defective.**—A register is kept of all the physically defective children in the Borough, and they are kept under frequent and careful supervision.

The numbers in 1924 were :—

					Boys.	Girls.
<i>Not attending School—</i>						
(a) Crippled Children—						
Severe heart disease ...	...	...	...	...	4	4
Old infantile paralysis	...	...	...	...	1	3
Rickets ...	...	...	...	...	1	—
Diseased knee joint	...	...	..	...	—	1
(b) Delicate Children	...	...	...	...	11	21
					—	—
					17	29
					—	—

<i>Attending School—</i>					Boys.	Girls.
(a) Crippled Children—						
Congenital dislocation	...	...	...	...	2	1
Old infantile paralysis	...	...	...	...	17	8
Club foot	...	...	...	...	2	—
Severe heart disease	...	...	...	...	14	17
Anchylorisis and diseased joints...	...	...	...	...	5	4
Amputated leg	...	...	...	...	1	—
Old fractures	...	...	...	...	2	—
Spinal curvature	...	...	...	...	—	1
Rickets	...	...	...	...	2	—
(b) Delicate Children	...	...	...	...	56	76
					101	107

Among the “**delicate**” children are included such cases as chorea, anæmia, debility, slight rickets, chronic bronchitis, rheumatism, asthma and malnutrition.

During the year the question of providing an **Orthopaedic Centre** at which many of these cases might attend was considered, and it was decided to approach the Board of Guardians with reference to the use, for this purpose, of the new Remedial Exercises Clinic at the Whitecross Hospital.

At this Institution the various forms of massage and electrical treatment are provided, as well as radiant heat and gymnastics.

The Guardians have offered to treat our cases at a flat rate of 2/- per attendance, with a charge of 3/6 per day for the maintenance of any children requiring to be retained in hospital. This arrangement is subject to the approval of the Board of Education, and will be reviewed at the end of six months.

(c) **Mentally Defective.**—The following feeble-minded children have been certified as suitable for education in a special school :—

Educable—					Boys.	Girls.	Total.
Attending Certified Schools for mentally defective children	...	...	...	...	1	—	1
Attending Public Elementary Schools	...	...	...	...	6	13	19
At no School or Institution	...	...	...	...	7	5	12
					14	18	32

In addition certain cases were notified to the Local Control Authority (in the case of Warrington, the Lancashire Asylums Board) under the Mental Deficiency Act, 1913 :—

Non-Educable—					Boys.	Girls.	Total.
Imbeciles	...	...	...	...	1	—	1
Idiots	...	...	...	...	1	—	1
					2	—	2

We have not established any special supervisory arrangements for children who remain under the jurisdiction of the Authority but for whom no special schools exist.

I am indebted to Miss Andrews for the following account of—

The Warrington Occupation Centre.

The Warrington Centre, which was opened in February, 1923, by the West Lancashire Association for Mental Welfare, meets twice weekly in the afternoons of Monday and Thursday, at the Friars Green School, Cairo Street.

Nine children are enrolled, and the average attendance for the last 6 months has been 5·4. In Warrington, as elsewhere, the attendance at the Centre would be larger if it were not for the difficulty of bringing the children, as they are seldom able to come alone. The number on the roll will be considerably increased when the services of a guide can be obtained, and it is hoped that there will shortly be funds available to meet this additional expense.

The improvement in the children attending is marked, especially in one case, a boy of 12 years of age. On admission he had frequent hysterical attacks, when he was quite uncontrollable. It is found that these can usually be averted and the child is much more even, and is beginning to have enough concentration to use his hands a little.

None of the children had any idea of direction or rhythm, and it was some time before they could keep a line and follow a leader. They now march in line and have some idea of rhythm. A little meal is partaken of during the afternoon, and is put ready and cleared away by the children. As in other Centres, we find this of great educative value, and is one of the most valuable means of making grossly defective children more normally behaved members of a family.

The class is conducted by Mrs. Moore on Monday, and by Miss Goldring on Thursday. It is financed partly from the total grants of £160 for the West Lancashire Area from the Mental Deficiency Act Committee and the Board of Control, but has to be supplemented by voluntary funds raised in Liverpool. We hope shortly to appeal for local subscriptions to enable us to develop the work.

The centre is particularly in need of the services of voluntary helpers, both in helping to occupy the children who need so much individual attention, and also in playing the piano for marching and games; the supervisor finds music an invaluable help in the work of the Centres.

(d) **Epileptics.**—The following cases are known to us :—

	Boys.	Girls.	Total
Severe Epilepsy—			
Attending public elementary schools ...	4	1	5
At no school or institution	8	11	19
In institutions other than certified schools	—	2	2
Attending certified schools	3	—	3
	15	14	29
Slight Epilepsy—			
Attending public elementary schools ...	1	1	2
At no school or institution	—	3	3
	1	4	5

The question of the provision of Special Schools for Defective Children has been before the School Medical Service Committee on many occasions.

The premises, “Fairfield House,” were inspected as to their suitability, but finally the Town Council was asked to provide a site in the Bewsey Ward for the purpose.

A special effort will be made to ascertain correctly the number of mentally defective children in the town during the coming year, and all the backward and retarded children will be examined with this end in view.

18.—NURSERY SCHOOLS.

There are no nursery schools in the area.

19.—SECONDARY SCHOOL.

All the children attending the Secondary School are medically examined once each year. In addition the School Doctor visits once each term to re-examine certain children and to see any special cases.

The Board’s schedule card is used in every instance, and the examination made is a thorough one.

During 1924 there were examined at the Secondary School (see Table I.) :—

Boys	...	...	...	...	...	...	143
Girls	...	...	...	...	...	...	158
							301

In addition there were 27 “ Special ” examinations in the School.

As regards the nutrition of the children (325 in 1923), the classification was as follows :—

		Above normal.	Normal.	Below normal.	Markedly defective.
Girls	...	9	146	3	—
Boys	...	1	133	9	—
		10	279	12	—
		3.3%	92.6%	3.9%	—

Comparable figures for public elementary school children are given on page 12.

The defects found requiring treatment were :—

Defective vision	...	...	...	...	17
Other defects	...	...	...	...	4
					21

In addition, the following cases were kept under special observation, though not requiring treatment at the time :—

Enlarged tonsils	...	...	...	...	1
Squint	...	...	...	...	1
Skin disease	...	...	...	...	1
					3

The results of the examination of the vision of the children is given in the following table, and on comparing them with the table on page 00, it is obvious that there are fewer defects among the children attending the Secondary School than the Elementary Schools :—

	1924	1923	1922
Total number of children whose vision was examined	300	325	311
Number of children with normal vision, both eyes ...	198	220	223
	66%	67.6%	71.7%
Number of children with good vision (not less than 6/9 both eyes) ...	39	37	28
	13%	11.3%	9%
Number of children with fair vision (not less than 6/12 and without eye-strain) ...	2	8	8
	.6%	2.4%	2.5%
Number of children whose vision was corrected by glasses	44	47	40
	14.6%	14.4%	12.8%
Number of children requiring treatment ...	17	13	11
	5.6%	4%	3.5%
Number of children whose vision cannot be improved by glasses ...	0	0	1
			.3%

It will be noted that the statistics are fairly constant each year.

Further Examinations.

The following were referred for special examination following the routine inspection :—

Boys	..	..	..	5
Girls	..	..	..	6
				—
				11
				—

Re-examinations.

There were 39 re-examinations in following up the cases requiring treatment, and 13 re-examinations of cases under observation.

20.—CONTINUATION SCHOOLS.

When established it is proposed to extend our present system of medical and dental inspection and treatment to the continuation Schools.

21.—EMPLOYMENT OF CHILDREN AND YOUNG PERSONS.

Remarks on this important subject have been given in previous Reports, notably those for 1920 and 1921.

Employment of Children Byelaws.

These first came into operation in September, 1921, and at once effected a reduction in the number of children employed partly because they prohibited certain forms of employment (*e.g.*, barbers' shops, places of amusement, etc.), and partly because many employers found that the restricted hours were too short for their business, and they engaged full-time adults in the place of part-time school children.

The number of children registered for employment at present is 163.

Number of Employment Cards in use, 1/1/24	...	...	...	143
„ „ issued during the year	...	...	...	169
„ „ withdrawn „	...	...	...	149
„ „ in use, 31/12/24	...	...	...	163
Number of cases contravention of Bye-Laws	...	...	...	151
Warned verbally	...	...	...	141
„ by letter	...	...	...	7
Appeared before S.M.S. Committee	...	...	...	3
Prosecutions	...	...	...	3
(Fines : 5/- each case).				
Medically examined	...	...	...	2
(Both fit).				

SUMMARY OF OCCUPATIONS OF EMPLOYED CHILDREN.

					Boys.	Girls.
Delivery of newspapers	...	...	...	...	52	2
Delivery of milk	...	...	...	...	31	8
Butchers' errands	...	...	...	...	11	—
Bakers' and Confectioners' errands			...	...	7	—
Grocers' errands	...	...	...	...	5	—
Greengrocers' errands	...	...	...	...	14	—
Drapers' errands	...	...	...	...	8	—
Gent's Outfitters errands	...	...	...	...	3	—
Milliners' errands	...	...	...	...	3	—
Stationers' errands	...	...	...	...	3	—
Hardware Dealers' errands	...	...	...	...	6	—
Chemists' errands	...	...	...	...	2	—
Wine Merchants' errands	...	...	...	...	1	—
Fish Dealers' errands	...	...	...	...	2	—
Delivery of firewood	...	...	...	...	2	—
Coal Yard assistant	...	...	...	...	1	—
Stables assistant	...	...	...	...	2	—
					—	—
					153	10

Street Trading Byelaws.

Previously, byelaws regulating street trading allowed children to be licensed from the age of 12 to 16 years. The Education Committee took over the control of street trading in March, 1920, under The Education Act, 1918, the number of children then licensed being 75, of ages from 14 to 16 years.

The present byelaws came into operation in September, 1921. No girls under 16 years of age are allowed to engage in street trading, and the age for boys is from 15 to 16 years. There are now only 9 boys engaged in these occupations.

Number of Licences in use, 1-1-24	...	...	...	...	...	27
„ „ issued during the year	...	...	...	...	...	16
„ „ withdrawn during the year	...	...	...	...	...	34
„ „ in use, 31-12-24	...	...	...	...	...	9
Number of cases of contravention of Bye-laws	...	...	...	...	...	71
Warned verbally	...	...	...	...	...	60
„ by letter	...	...	...	...	...	4
Appeared before S.M.S. Committee	...	...	...	...	...	7
Prosecutions	...	...	...	...	...	3
(Fines, two 10/-, one 5/-)						
Medically examined	...	...	...	...	...	2
(Not fit, 2)						

The number of offences against the byelaws discovered by the Officer is shown for the past three years :—

	No. of Contraventions.	
	Employment of Children bye-laws.	Street trading bye-laws.
1924.....	151	71
1923.....	117	98
1922.....	163	114

The Local Education Authority during the year decided to exercise powers under Section 107 of the Education Act, 1921, and Section 6 (1) of the Unemployment Insurance Act, 1923.

A special Juvenile Employment Committee will be set up by the Authority, consisting of 15 members, associated with the following bodies :—

- 5 Representing the Education Committee.
- 2 Nominated by the Chamber of Commerce.
- 2 ,, ,, Manufacturing Trades Association.
- 2 ,, ,, Trades and Labour Council.
- 2 ,, ,, Council of Social Service.
- 2 ,, ,, Teachers' Association.

This Committee will arrange for boys and girls under 18 to receive, either directly or through their parents' information and advice with regard to suitable employment, and will study the state and conditions of employment so far as these affect the prospects of boys and girls in the area. The Authority will also undertake Unemployment Insurance at their Juvenile Employment Bureau.

22.—SPECIAL ENQUIRIES.

1.—The Treatment of Ringworm of the Scalp.

This is one of the most troublesome of all the minor ailments, and it is of interest to compare the results we have obtained from year to year, and to endeavour to assess the value of X-Ray treatment.

The following table shows the number of cases discovered among the school children and treated each year since 1912 :—

Year	Total No. of Cases	How Cases were treated		No. of days under treatment			Average length of treatment before returning to School in days		
		Drug	X-Ray	(1) Drug	(2) Drug then X-Ray	† (3) X-Ray	(1) Drug	(2) Drug then X-Ray	(3) X-Ray
1912	21	21	—	1131	—	—	94.2	—	—
1913	19	19	—	920	—	—	153.3	—	—
1914	65	65	—	4152	—	—	112.2	—	—
1915	162	162	—	6549	—	—	48.8	—	—
1916	175	175	—	12469	—	—	85.4	—	—
1917	132	132	—	7806	—	—	70.9	—	—
1918	142	142	—	11171	—	—	93.8	—	—
1919	145	145	—	7151	—	—	52.03	—	—
1920	167	167	—	8287	—	—	63.8	—	—
1921*	141	141	—	4867	—	—	76.7	—	—
1922	71	17	54	1016	3851	3068†	59.7	71.3	56.8
1923	62	46	16	2570	1437	919	55.8	89.8	57.4
1924	64	39	25	2522	2128	1383	64.6	85.1	55.3

* Inception of X-Ray treatment, December, 1921.

† The number of days in this column are included in the total in the previous column (2).

I do not think that there can be any doubt of the value of X-Ray treatment for ringworm of the scalp. There has been a marked drop in the incidence of the disease in our schools since we provided facilities for this form of treatment in December, 1921. In fact, the number of cases annually for the past 3 years has only been about half what it was for the preceding seven years. To some extent this decline may be due to the closer supervision of the children in the schools by the teachers, and by the daily visits of the nurses, which were instituted in 1920.

In taking the average period of absence of cases from school that received X-Ray treatment, it has to be borne in mind that the majority receive a preliminary course of drug treatment, and the length of this must be deducted in order that we may assess more accurately the value of X-Rays in effecting a speedy cure.

Thus during the three years, 1922, 1923, 1924, the average length of time cases were away from school which received drug treatment was only 59.7, 55.8 and 64.6 days, respectively. The length of time that the cases treated by X-Rays were absent from school was 71.3, 89.8 and 85.1 days for the same years, which, at first sight, compares unfavourably, but these latter cases from the first exposure to the Rays were only absent 56.8, 57.4 and 55.3 days, which is a big reduction, especially considering that on the average these cases were more severe than those that received drug treatment only.

Cases are not always obtained as early for X-Ray treatment as might be because parents often desire to try ordinary Clinic treatment for more or less prolonged periods first.

This is not owing to the fact that fees are charged for the treatment so much as to timidity of the exposures, and parents often ask, " Does it hurt ? "

In a few cases, too, the fact that there is some risk that the hair may not grow again fully deters parents from accepting the treatment until much valuable time has been lost. During 1924, only 3 parents refused to allow their children to have X-Ray treatment, compared with 14 in 1923. There have been a few cases (altogether 9 out of 95) in which dermatitis has occurred after the exposures. In most instances this has been very slight, and, moreover, occurred only soon after inception of our scheme, when we were dealing with the severe and chronic cases, some of which had been absent from school for more than twelve months.

The treatment adopted in the Clinic during the above period has been as follows :—

1912-1914 :—Tinct. iodi.

1915 & 1916 :—Tr. iodi and ung. hyd. ammon.

1917 :—Tr. iodi and ung. hyd. ammon, ung. iodex.

1918 & 1919 :—Tr. ferri perchlor., iodex, ung. hyd. am. and ung. salicylic.

1920 & 1924 :—Ung. sod. chlor. c vaseline, ung. salicylic, iodex. and tr. ferri perchlor.

1922 :—as 1920 and 1921, but X-rays in addition.

1923 :—X-rays, ung. hyd. sub-chlor. c iodi, sodæ chlor. c vaseline.

1924 :—X-rays, collosol iodine, iodex, sodæ chlor c vaseline.

The results of drug treatment have been very variable, and many factors have to be taken into account. However, on the whole, treatment has been most successful with sodium chloride and vaseline which acts as a rapid depilatory.

2.—A comparison of the defects amongst entrants who attended the Infant Consultation Centres and those who did not.

The comparison of the defects found at Routine inspection between the two classes commenced in 1923 and was continued throughout 1924.

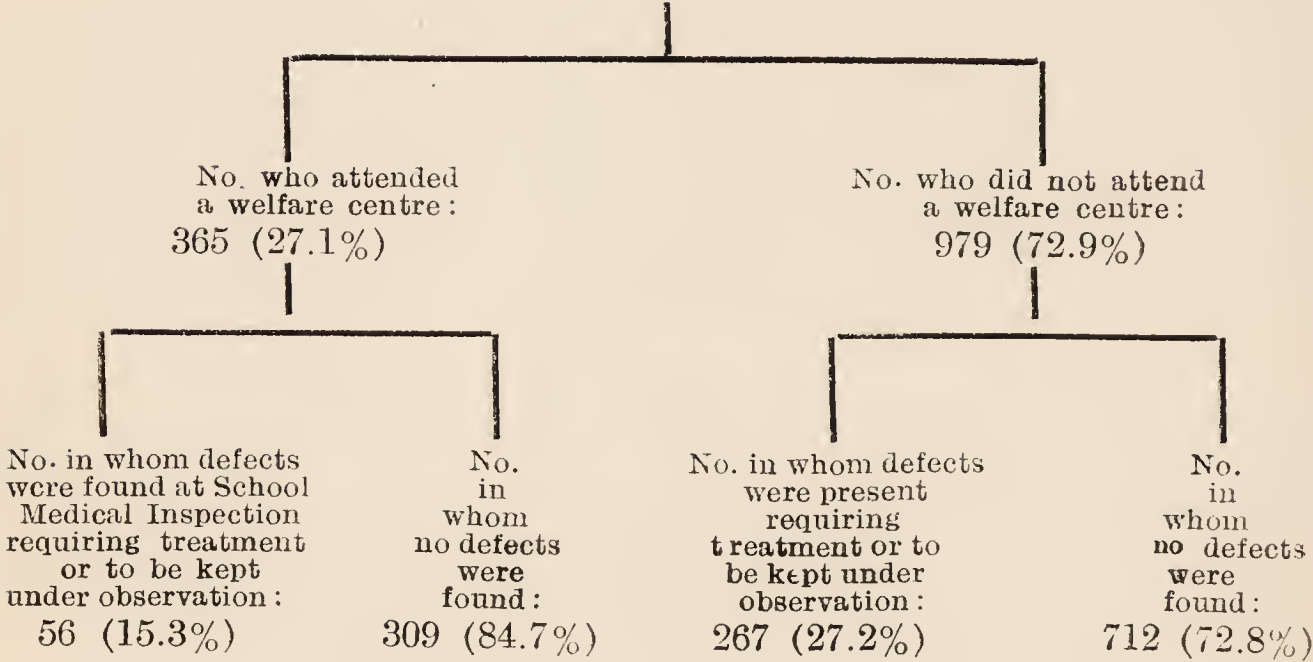
The number of children passing through our Infant Welfare Centres increases each year :—

			Entrants.	No. who attended I.W.C.	Percentage.
1922	...	...	1309	166	12.6%
1923	...	...	995	213	21.4%
1924	...	...	1344	365	27.1%

The following table shows the result of our investigation :—

1924.

No. of entrants examined :
1344.



Defects.

Enlarged tonsils ...	24	(6.5%)
Adenoids	7	(1.9%)
Enlarged tonsils & adenoids	—	—
Squint	4	(1.6%)
Malnutrition	3	(.8%)
Anæmia	1	(.26%)
Bronchitis	9	(2.4%)
Enl. cervical glands	1	(.26%)
Aural discharge ...	—	—
Rickets	—	—
Ped. Cap.	—	—
Other defects or diseases	8	(2.1%)

*Consisting of—

Defective speech ...	1
Diseases of eye	—
Diseases of skin	1
Dental diseases	—
Aural obstruction ...	1
Mouth breathers ...	1
Curvature of spine...	1
Uncleanliness	—
Ganglion	1
Infantile paralysis ...	1
Rashes	1
Chorea	—
T.B. peritonitis	—

Defects.

57	(5.8%)
21	(2.1%)
9	(.9%)
—	—
16	(1.6%)
2	(.2%)
—	—
40	(4%)
2	(.2%)
12	(1.2%)
2	(.2%)
25	(2.5%)
138	(14%)

†Consisting of—

Defective Speech.....	3
Diseases of eye	14
Diseases of skin	20
Dental diseases	2
Aural obstruction	13
Mouth breathers	7
Curvature of spine ...	3
Uncleanliness	64
Ganglion	—
Rashes	9
Infantile paralysis	—
Chorea	2
T.B. peritonitis	1

It is noteworthy that among the entrants who attended the Centres there were no cases of :—

Enlarged tonsils and adenoids,
Aural discharge,
Rickets,
Verminous heads,
Uncleanliness,

and in general the incidence of most other defects was lower.

I think this testifies to the value of the work of these Centres, and the best thanks of the town are due to the Voluntary Society carrying out this work in conjunction with the Health Committee.

23.—MISCELLANEOUS.

Examination of Bursars, Student and Pupil Teachers.

During 1924, 24 Candidates for Student Teacherships were medically examined and found fit by the School Medical Officer.

Examination of Children Before Entry to Special Schools.

Giris	..	..	..	0
Boys	..	..	..	6
				—
Total	..	..	..	6
				—

Number of Children Examined Before Summer Camp.

The total number of children examined by the A.S.M.O. as to fitness to attend the Summer Camp in 1924 was 399.

TABLE I.—RETURN OF MEDICAL INSPECTIONS, 1ST JANUARY, 1924,
TO 31ST DECEMBER, 1924.

A.—ROUTINE MEDICAL INSPECTIONS.

Number of Coded Group Inspections :—

	Age 5		Age 6		Age 7		Totals
	Boys	Girls	Boys	Girls	Boys	Girls	
Entrants	542	478	152	136	20	16	1344
Intermediates			Age 8		Age 9		1336
			613	628	46	49	
Leavers			Age 13		Age 14		1303
			621	615	27	40	
			TOTALS		Boys 2021	}	3983
					Girls 1962		

Number of other Routine Inspections (Secondary School) :—

Boys	Girls	Total
143	158	301

B.—OTHER INSPECTIONS.

Number of Special Inspections :—

Elementary Schools	....	....	2133
Secondary Schools	....	....	27

Number of Re-inspections :—

Elementary Schools	....	....	2545
Secondary Schools	....	....	63
Total (other Inspections)			4768

TABLE IIA.—RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION
IN THE YEAR ENDED 31ST DECEMBER, 1924.

Defect or Disease		ELEMENTARY SCHOOLS				SECONDARY SCHOOL			
		Routine Inspections		Specials		Routine Inspections		Specials	
		No. of Defects		No. of Defects		No. of Defects		No. of Defects	
		Requiring Treatment	Requiring to be kept under observation, but NOT re-quiring treatment.	Requiring Treatment	Requiring to be kept under observation, but NOT re-quiring treatment.	Requiring Treatment	Requiring to be kept under observation, but NOT re-quiring treatment.	Requiring Treatment	Requiring to be kept under observation, but NOT re-quiring treatment.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
Skin	Malnutrition	38	—	5	—	—	—	—	—
	Uncleanliness	197	—	5	—	3	—	—	—
	(See Table IV, Group V.)								
	Ringworm (Scalp)	4	—	1	—	—	—	—	—
	" (Body)	3	—	1	—	—	—	—	—
	Scabies	7	—	—	—	—	—	—	—
	Impetigo	24	—	1	—	—	—	—	—
Eye	Other diseases (non-Tuberculous)	15	—	3	—	—	1	—	—
	Blepharitis	23	—	8	—	—	—	—	—
	Conjunctivitis	6	—	2	—	—	—	—	—
	Keratitis	—	—	—	—	—	—	—	—
	Corneal Opacities	—	1	2	3	—	—	—	—
	Defective vision (ex-cluding Squint)	237	4	138	11	17	—	—	—
	Squint	27	6	76	9	—	1	—	—
Ear	Other conditions	2	4	1	2	—	—	—	—
	Defective Hearing	—	—	—	13	—	—	—	—
	Otitis Media	—	3	—	2	—	—	—	—
Nose & Throat	Other Ear diseases	65	—	33	1	1	—	—	—
	Enlarged Tonsils only	131	59	37	3	—	1	—	—
	Adenoids only	62	5	60	1	—	—	—	—
	Enlarged Tonsils and adenoids	17	2	23	—	—	—	—	—
Enlarged Cervical Glands (non-Tuberculous)	Other Conditions	10	1	17	4	—	—	—	—
		6	2	—	—	—	—	—	—

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
Defective Speech	....	—	7	—	10	—	—	—	—	
Teeth—Dental Diseases (see Table IV, Group IV.)	....	13	—	1	—	—	—	—	—	
Heart and Circulation	{ Heart Disease : Organic Functional Anæmia	....	—	2 1 1	—	1 — 1	—	—	—	
Lungs	{ Bronchitis Other Non-Tuber- culous Diseases	....	63 —	4 1	6 —	1 —	—	—	—	
Tuber- culosis	{ Pulmonary : definite suspected Non-Pulmonary : Glands Spine Hip Other bones and joints Skin Other forms	....	—	—	—	—	—	—	—	
		....	—	—	1	—	—	—	—	—
		....	—	—	1	—	—	—	—	—
			—	—	—	—	—	—	—	—
			—	—	—	—	—	—	—	—
			—	—	—	—	—	—	—	—
			—	—	—	—	—	—	—	—
Nervous System	{ Epilepsy Chorea Other conditions	....	—	1	—	4	—	—	—	
		....	—	7	—	4	—	—	—	—
		....	—	—	—	2	—	—	—	—
Deform ities	{ Rickets Spinal Curvature Other forms	....	1	4	—	1	—	—	—	
		....	—	8	—	2	—	—	—	—
		....	—	3	—	3	—	—	—	—
Other Defects and Diseases	....	35	16	8	9	—	—	—	1	

TABLE IIB.—Number of INDIVIDUAL CHILDREN found at ROUTINE Medical Inspection to require treatment (excluding uncleanliness and Dental Diseases).

Group (1)	Number of Children		Percentage of children found to require treatment (4)
	Inspected (2)	Found to require treatment (3)	
CODE GROUPS—			
Entrants	1344	206	15.32
Intermediates	1336	279	20.88
Leavers	1303	224	17.19
Total (Code Groups)	3983	709	17.8
Other routine inspections (Secondary School)	301	18	5.98

TABLE III.—RETURN OF ALL EXCEPTIONAL CHILDREN IN THE AREA.

			Boys	Girls	Total
Blind (including partially blind)	(i) Suitable for training in a school or Class for the totally blind	Attending Certified Schools or Classes for the Blind	5	10	15
		Attending Public Elementary Schools	—	—	—
		At other Institutions	—	—	—
		At no School or Institution	1	—	1
	(ii) Suitable for training in a School or Class for the partially blind	Attending Certified Schools or Classes for the Blind	—	—	—
		Attending Public Elementary Schools	—	—	—
		At other Institutions	—	—	—
		At no school or Institutions	—	—	—
Deaf (including deaf and dumb and partially deaf)	(i) Suitable for training in a School or Class for the totally deaf or deaf and dumb	Attending Certified Schools or Classes for the Deaf	—	4	4
		Attending Public Elementary Schools	—	—	—
		At other Institutions	—	—	—
		At no School or Institution....	—	1	1
	(ii) Suitable for training in a School or Class for the partially deaf	Attending Certified Schools or Classes for the Deaf	—	—	—
		Attending Public Elementary Schools	—	—	—
		At other Institutions	—	—	—
		At no School or Institution....	—	—	—
Mentally Defective	Feebleminded (cases not notifiable to the Local Control Authority)	Attending Certified Schools for Mentally Defective Children	1	—	1
		Attending Public Elementary Schools	6	13	19
		At other Institutions	—	—	—
		At no School or Institution	7	5	12
	Notified to the Local Control Authority during year	Feebleminded	—	—	—
		Imbeciles	1	—	1
		Idiots	1	—	1
Epileptics	Suffering from severe epilepsy	Attending Certified Special Schools for Epileptics	3	—	3
		In Institutions other than Certified Special Schools	—	2	2
		Attending Public Elementary Schools	4	1	5
		At no School or Institution....	8	11	19
	Suffering from epilepsy which is not severe	Attending Public Elementary Schools	1	1	2
		At no School or Institution	—	3	3

TABLE III.—RETURN OF ALL EXCEPTIONAL CHILDREN IN THE AREA
(continued)

			Boys	Girls	Total
Physically Defective	Infectious pulmonary and glandular tuber- culosis	At Sanatoria or Sanatorium Schools approved by the Ministry of Health or the Board	—	1	1
		At other Institutions	—	—	—
		At no School or Institution	2	4	6
	Non-infectious but active pulmonary and glandular tuber- culosis	At Sanatoria or Sanatorium Schools approved by the Ministry of Health or the Board	5	1	6
		At Certified Residential Open Air Schools	—	—	—
		At Certified Day Open Air Schools	—	—	—
		At Public Elementary Schools	79	42	121
		At other Institutions	3	—	3
		At no School or Institution	10	5	15
	Delicate children (<i>e.g.</i> pre- or latent tuber- culosis, malnutri- tion, debility, anæmia, etc.	At Certified Residential Open Air Schools	—	—	—
		At Certified Day Open Air Schools	—	—	—
		At Public Elementary Schools	56	76	132
		At other Institutions	2	2	4
		At no School or Institution....	10	21	31
	Active non-pulmon- ary tuberculosis	At Sanatoria or Hospital Schools approved by the Ministry of Health or the Board	2	1	3
		At Public Elementary Schools	5	1	6
		At other Institutions	1	1	2
		At no School or Institution....	4	2	6
	Crippled children (other than those with active tuber- culous disease (<i>e.g.</i> children suffering from paralysis, etc., and including those with severe heart disease	At Certified Hospital Schools	—	—	—
		At Certified Residential Cripple Schools	—	—	—
		At Certified Day Cripple Schools	—	—	—
		At Public Elementary Schools	45	31	76
		At other Institutions	1	1	2
		At no School or Institution....	6	8	14

TABLE IV.—RETURN OF DEFECTS TREATED DURING THE YEAR
ENDED 31ST DECEMBER, 1924.

TREATMENT TABLE.

GROUP I.—MINOR AILMENTS (EXCLUDING UNCLEANLINESS, FOR WHICH SEE
GROUP V.):—

Disease or Defect (1)	Number of defects treated, or under treatment during the year.		
	Under the Authority's Scheme (2)	Otherwise (3)	Total (4)
SKIN—			
Ringworm (Scalp)	64	12	76
„ (Body)	30	7	37
Scabies	21	1	22
Impetigo	140	27	167
Other Skin Disease	—	19	19
MINOR EYE DEFECTS— (External and other, but excluding cases falling in Group II)	115	68	183
MINOR EAR DEFECTS	7	8	15
MISCELLANEOUS— (e.g., minor injuries, bruises, sores, chil- blains, etc.)	21	201	222
Total	398	343	741

TABLE IV.—Continued.

GROUP II.—DEFECTIVE VISION AND SQUINT (EXCLUDING MINOR EYE DEFECTS TREATED AS MINOR AILMENTS—GROUP I.) :—

Defect or Disease (1)	Number of Defects dealt with			
	Under the Authority's Scheme (2)	Submitted to refraction by private practitioner or at hospital apart from the Authority's Scheme (3)	Other- wise (4)	Total (5)
ELEMENTARY SCHOOLS— Errors of Refraction (including squint) (Operations for squint should be recorded separately in the body of the Report). Other Defect or Disease of the eyes (excluding those recorded in Group I)	406	78	*116	600
Total	406	80	116	602
SECONDARY SCHOOL— Errors of Refraction (including squint) Other Defect or Disease of the eyes (excluding those recorded in Group I)	2	10	3	15
Total	2	10	3	15

TOTAL NUMBER OF CHILDREN FOR WHOM SPECTACLES
WERE PRESCRIBED :—

	Elementary Schools	Secondary School
(a) Under the Authority's Scheme	320	1
(b) Otherwise	*117	10

TOTAL NUMBER OF CHILDREN WHO OBTAINED OR
RECEIVED SPECTACLES :—

(a) Under the Authority's Scheme	341	1
(b) Otherwise	*117	10

*This includes 22 repairs.

TABLE IV.—Continued.

GROUP III.—TREATMENT OF DEFECTS OF NOSE AND THROAT. :—

NUMBER OF DEFECTS				
Received Operative Treatment				
Under the Authority's Scheme in Clinic or Hospital (1)	By Private Practitioner or Hospital apart from the Authority's Scheme (2)	Total (3)	Received other forms of Treatment (4)	Total number treated (5)
ELEMENTARY SCHOOLS — 169	12	181	169	350
SECONDARY SCHOOL— —	1	1	3	4

GROUP IV.—DENTAL DEFECTS :—

ELEMENTARY SCHOOLS.

(1) Number of Children who were :—

(a) Inspected by the Dentist.

		Aged							
		4		....	51				
		5		....	596				
		6		....	1589				
		7		....	1330				
		8		....	2415				
Routine Age Groups		....	9	....	2676			Total	16,660
			10	....	3134				
			11	....	1380				
			12	....	1408				
			13	....	1249				
			14	....	832				
Specials	....	....	....	....	....	....	....	664	
Grand Total								....	17,324
(b) Found to require treatment								....	13107
(c) Actually treated								....	2913
(d) Re-treated during the year as the result of periodical exam.								....	2217
(2) Half-days devoted to		{ Inspection 236 }		Total		....	....	....	503
		{ Treatment 267 }							
(3) Attendances made by children for treatment								....	2913
(4) Fillings		{ Permanent teeth 546 }		Total		....	....	812	
		{ Temporary teeth 266 }							
(5) Extractions		{ Permanent teeth 273 }		Total		....	....	4239	
		{ Temporary teeth 3966 }							
(6) Administrations of general anæsthetics for extractions								....	—
(7) Other Operations		{ Permanent teeth 232 }		Total		....	....	235	
		{ Temporary teeth 3 }							

TABLE IV.—Continued.

GROUP IV.—DENTAL DEFECTS :—

SECONDARY SCHOOL.

(1) Number of Children who were :—

(a) Inspected by the Dentist

				Aged				
Routine Age Groups	....			10	....	1	Total 301	
				11	....	32		
				12	....	44		
				13	....	80		
				14	....	57		
				15	....	62		
				16	....	21		
				17	....	4		
Specials	....	....	....	....	....	....	—	
Grand Total							....	301
(b) Found to require treatment	....	....	....	....	....	....	170	
(c) Actually treated	....	....	....	....	....	....	39	
(d) Re-treated during the year as the result of periodical exam.	....						31	
(2) Half-days devoted to	{	Inspection	13	{	Total	....	....	16
		Treatment	3			....	....	
(3) Attendances made by children for treatment	....	....	....	....			39	
(4) Fillings	{	Permanent teeth	19	{	Total	....	....	19
		Temporary teeth	—			....	....	
(5) Extractions	{	Permanent teeth	6	{	Total	....	....	12
		Temporary teeth	6			....	....	
(6) Administrations of general anæsthetics for extractions	....	....	....	....			—	
(7) Other Operations	{	Permanent teeth	11	{	Total	....	....	11
		Temporary teeth	—			....	....	

GROUP V.—UNCLEANLINESS AND VERMINOUS CONDITIONS :—

(i) Average number of visits per school made during the year by the School Nurses	....	....	....	....	12.6
(ii) Total number of examinations of children in the schools by School Nurses	....	....	....	....	32,857
(iii) Number of individual children found unclean	....	....	....	....	1,788
(iv) Number of children cleansed under arrangements made by the Local Education Authority	....	....	....	....	—
(v) Number of cases in which legal proceedings were taken :—					
(a) Under the Education Act, 1921	....	....	....	....	Nil
(b) Under School Attendance Byelaws	....	....	....	....	Nil